

**REMARKS**

Claims 1-4 are pending in the application and were last examined. Claims 2-4 have been rewritten to be in independent form. No prohibited new matter has been added by way of these amendments. In view of the amendments and the following remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

***Claim Objections:***

In paragraph 3 of the office action claims 2-4 are objected to as being of improper dependent form. Claims 2 and 3 have been rewritten in independent form as suggested by the Examiner. With respect to Claim 4, Applicants respectfully disagree with the Examiner's objection. The term "array" is defined in the specification as including a support with nucleic acids probes attached to the support, see the specification at page 19, lines 3-4. Claim 4 further limits claim 1 by specifying that the support includes a plurality of beads to which the probes are attached. However, in the interest of advancing the application Applicants have rewritten claim 4 in independent form as suggested by the Examiner. In view of the amendments, Applicants respectfully request that the objection be withdrawn.

***Rejection of Claims 1-4 Under 35 U.S.C. § 102(a):***

In paragraph 5 of the office action the Examiner has rejected claims 1-4 as allegedly being anticipated by Affymetrix GeneChip Human Mapping 10K array (product Data Sheet, 2003; pages 1-4). Applicants respectfully traverse this rejection and assert that the Mapping 10K array is not available as prior art against the present claims.

Claims 1-4 are directed at an array consisting of SEQ ID Nos. 1-124,031. As noted by the Examiner, the instant application claims priority to provisional application 60/417,190, filed October 8, 2002. The '190 provisional provides a sequence listing of SEQ ID Nos. 1-122,930 so there are sequences on the presently claimed array that are not provided in the '190 provisional. The instant application also claims priority to provisional application 60/470,475 filed May 14, 2003, which discloses SEQ ID Nos. 1-124,031. The disclosure of the '475 application fully supports the instantly claimed array so the priority date of the instant claims should be at least May 14, 2003.

The rejection is based on the application by the Examiner of the Affymetrix GeneChip Human Mapping 10K array as prior art against the instantly claimed array. Applicants respectfully assert that the array is not available as prior art against the present claims. Firstly, 35 U.S.C. §102(a) indicates that "A person shall be entitled to a patent unless—(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, *before the invention thereof by the applicant* for patent" 35 U.S.C. 102 (emphasis added). As the Examiner has acknowledged, the Affymetrix GeneChip Human Mapping 10K array described in the product Data Sheet is Applicant's own invention so it is not available as art under 102(a) because it could not possibly have been used before it was invented by the Applicant. Secondly, the Affymetrix GeneChip Human Mapping 10K array was launched as a commercial product on July 23, 2003, see the press release attached as Exhibit 1. The July 23, 2003 launch date of the product is more than 2 months after the May 14, 2003 filing date of the '475 provisional application. Accordingly, Applicants respectfully request that the rejection be withdrawn.

**CONCLUSION**

In view of the foregoing amendments and remarks, Applicants respectfully request withdrawal of all outstanding rejections and early notice of allowance to that effect. Should the Examiner believe that a telephonic interview would expedite allowance of this application, he is encouraged to contact the undersigned at his convenience.

Except for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§ 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No.01-0431. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

Dated: June 28, 2007

Respectfully submitted,

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Attachment: Exhibit 1

**Exhibit 1: Affymetrix Press Release**


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**Affymetrix Launches Mapping 10K Array and CustomSeq(TM) Resequencing Array**  
**Customers Report Success with New Affymetrix GeneChip(R) DNA Analysis Products**

SANTA CLARA, Calif., Jul 23, 2003 /PRNewswire-FirstCall via COMTEX/ — Affymetrix, Inc., (Nasdaq: AFFX) today announced the broad availability of two new GeneChip(R) brand products for DNA analysis: the Mapping 10K Array for whole genome SNP analysis and the CustomSeq(TM) Resequencing Array for large-scale, custom resequencing projects. The products were successfully tested by nearly 50 early access customers during the past nine months in a variety of applications, including genetic linkage analysis, mitochondrial genome resequencing and cancer cell genotyping.

"Using the Mapping 10K we found a disease locus in a week's time," said Dr. Peter Nuernberg, Director of the Gene Mapping Center at the Max-Deibrock Center in Berlin. "With conventional microsatellite analysis this usually takes several months. The Mapping 10K array technology is superior to microsatellites and will change the way we do genetic linkage analysis."

"In less than two weeks, I completely resequenced 20 mitochondrial genomes using CustomSeq arrays," said Dr. Anirban Mitra, Assistant Professor of Medicine, Johns Hopkins University. "I used only three PCR amplifications, dramatically simplifying the sample prep required. Data analysis proved to be faster and more accurate than with capillary sequencing. By enabling the individual researchers to conduct large-scale sequencing experiments in their own labs, CustomSeq arrays will facilitate the adoption of complete sequence analysis for clinical applications."

Affymetrix DNA analysis products use the same GeneChip technology that revolutionized mRNA gene expression analysis, enabling researchers to understand both the function and variation of whole genomes on a single, integrated platform. The Mapping 10K Array and CustomSeq(TM) Resequencing Array bring more information to the benchtop, creating an opportunity for both individuals and institutions to conduct large-scale research.

"These new product lines meet the growing customer demand for powerful SNP genotyping and resequencing solutions in basic research, clinical research and development, drug discovery, and pharmacogenomics," said Greg Yap, Affymetrix' Senior Marketing Director, DNA Analysis. "High-resolution DNA analysis tools like these will give customers richer information and clearer insights, leading to better decisions."

#### Mapping 10K Array

The Mapping 10K Array brings whole genome SNP analysis to the benchtop by combining an innovative, scalable assay with a proven information platform — 1 primer, 1 array, 10,000 SNPs. The Mapping 10K delivers the most markers and highest resolution available in a single experiment, making it easier to pinpoint genomic regions linked to disease. The Mapping 10K's innovative assay does not require thousands of individual primers or multiplex PCR, enabling researchers to analyze 10,000 SNPs with a single primer pair. The assay uses only 250 ng of DNA — far less than conventional methods. Genotype calling is automatic and highly accurate, as measured by more than 99.5 percent concordance with other methods and more than 99.9 percent reproducibility. Applications include genetic linkage studies of inherited disease in families, cancer genetics, and population genetics.

Some early customers have already conducted large studies using the Mapping 10K, such as Novartis, which recently completed a study of over 500 individuals in two weeks producing over 5 million genotypes.

"With the new GeneChip Mapping 10K, Affymetrix now offers the most comprehensive technology available for whole genome scans," said Christian Lavedan, Director of the Pharmacogenomics Laboratory at Novartis. "The assay is amenable to high throughput genotyping analysis. The Mapping 10K is the first product to allow customers to map blocks of linkage disequilibrium (LD). You do not need a marker every 5 kb to start doing these experiments. Ten thousand SNPs provide sufficient resolution to examine a large portion of the genome for association studies."

"The Mapping 10K Array allowed us to genotype cancer cells much faster than before and at the same time detect chromosomal copy number changes, including loss of heterozygosity (LOH), amplification, and deletion, at greater resolution than previously available," said Dr. Richard Wooster, Senior Investigator, Wellcome Trust Sanger Institute. "This will rapidly advance our understanding of the genetic changes that arise during the development of cancer."

#### CustomSeq Resequencing Array

The CustomSeq Resequencing Array can sequence and genotype 30,000 base pairs in just two days. Researchers can choose any sequence, including either long regions or different combinations of genes. Overall accuracy is greater than 99.99 percent. Completed sequence across both strands (30,000 bases each strand) is delivered automatically with minimal assembly and sequence alignment, making high-throughput resequencing accessible to every researcher.

Applications for CustomSeq arrays include pathogen resequencing and subtyping, mitochondrial sequence analysis, and SNP discovery.

For more information about Affymetrix DNA analysis products, including the Mapping 10K Array for whole genome scanning and the CustomSeq Resequencing Array for comparative sequencing, visit [www.affymetrix.com](http://www.affymetrix.com), or contact your local Affymetrix representative.

#### About Affymetrix:

Affymetrix is a pioneer in creating breakthrough tools that are driving the genomic revolution. By applying the principles of semiconductor technology to the life sciences, Affymetrix develops and commercializes systems that enable scientists to improve the quality of life. The Company's customers include pharmaceutical, biotechnology, agrochemical, diagnostics and consumer products companies as well as academic, government and other non-profit research institutes. Affymetrix offers an expanding portfolio of integrated products and services, including its integrated GeneChip platform, to address growing markets focused on understanding the relationship between genes and human health. Additional information on Affymetrix can be found at [www.affymetrix.com](http://www.affymetrix.com).

All statements in this press release that are not historical are "forward-looking statements" within the meaning of Section 21E of the Securities Exchange Act as amended, including statements regarding Affymetrix' "expectations," "beliefs," "hopes," "intentions," "strategies" or the like. Such statements are subject to risks and uncertainties that could cause actual results to differ materially for Affymetrix from those projected, including, but not limited to risks of the Company's ability to achieve and sustain higher levels of revenue, higher gross margins, reduced operating expenses, uncertainties relating to technological approaches, manufacturing, product development, market acceptance (including uncertainties relating to product development and market acceptance of the GeneChip 10K Mapping Array and GeneChip CustomSeq Resequencing array), personnel retention, uncertainties related to cost and pricing of Affymetrix products, dependence on collaborative partners, uncertainties relating to sole source suppliers, uncertainties relating to FDA and other regulatory approvals, competition, risks relating to intellectual property of others and the uncertainties of patent protection and litigation. These and other risk factors are discussed in Affymetrix' Form 10-K for the year ended December 31, 2002 and other SEC reports, including its Quarterly Reports on Form 10-Q for subsequent quarterly periods. Affymetrix expressly disclaims any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in Affymetrix' expectations with regard thereto or any change in events, conditions, or circumstances on which any such statements are based.

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